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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,132	12/06/2004	Shaily Verma	PU020265	6857
24498 7590 01/11/2008 THOMSON LICENSING LLC Two Independence Way Suite 200 PRINCETON, NJ 08540			EXAMINER SHAND, ROBERTA A	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/517,132		VERMA ET AL.	
	Examiner		Art Unit	
	Roberta A. Shand		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/6/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 7-9, 11, 14-18, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilchrist (U.S. 7042855 B1).

3. Regarding claim 1. Gilchrist teaches (fig. 8) a method for supporting an interworking between a WLAN and a mobile communications system, the mobile communications system having a first support node (803) for interfacing a radio access network (802) to a core network and a second support node for interfacing the mobile communications system to a second communications system, the method comprising the steps of: providing an IWF (MSC/IWF) associated with the WLAN and coupled to the mobile communications system; establishing at least one tunneling protocol - user plane tunnel between the IWF (MSC/IWF) and the second support node (804) for transferring data signals; and establishing at least one tunneling protocol - control plane tunnel between the first support node (803) and the second support node (804) for transferring control signals (col. 9, line 42 – col. 10, line 11).

4. Regarding claims 2 and 16, Gilchrist teaches (fig. 8) the mobile communications network comprises a UMTS network, the first support node comprises SGSN (803), the second support node comprises a GGSN (804), the tunneling protocol - user plane tunnel comprises a GPRS tunneling protocol (col. 4, lines 8-28) - user plane (GTP-U) tunnel, and the tunneling protocol - control plane tunnel comprises a GPRS tunneling protocol - control plane (GTP-C) tunnel (col. 4, lines 8-28).

5. Regarding claims 3 and 17, Gilchrist teaches (fig. 8) the IWF is configured as a logical SGSN with respect to the data signals.

6. Regarding claims 4 and 18, Gilchrist teaches (col. 4, lines 8-48) defining a GTP tunnel in a GTP-U for at least one PDP context in at least one of the GGSN and the IWF.

7. Regarding claims 7 and 21, Gilchrist teaches (col. 3, lines 38-52) a GTP-C carries GPRS mobility management functions.

8. Regarding claims 8 and 22, Gilchrist teaches (fig. 8) providing access to both the WLAN and the mobile communications system through a single point of attachment consisting of the GGSN (804).

9. Regarding claim 9, Gilchrist teaches (fig. 8) core network includes, the GGSN (804) and the SGSN (803), and maintaining a connection between a UE (801) and the core network while

diverting data to the UE (801) through the at least one GTP-U tunnel between the GGSN (804) and the IWF (MSC/IWF).

10. Regarding claim 11, Gilchrist teaches (fig. 9) authenticating a UE by the mobile communications network; communicating a result of said authenticating step to the IWF through the GGSN.

11. Regarding claim 14, Gilchrist teaches (fig. 9) the step of employing encryption used by the mobile communications network for a user connecting to the WLAN.

12. Regarding claim 15, Gilchrist teaches (fig. 8) an apparatus for supporting an interworking between a WLAN and mobile communications network, the mobile communications network having a first support node (803) for interfacing a radio access network to a core network and a second support node (804) for interfacing the mobile communications system to a second communications system, the interworking being facilitated by an IWF (MSC/IWF), the apparatus comprising: means for establishing at least one tunneling protocol - user plane tunnel between the IWF (MSC/IWF) and the second support node for transferring data signals; and means for establishing at least one tunneling protocol - control plane tunnel between the first support node and the second support node (804) for transferring control signals (col. 9, line 42 – col. 10, line 11).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5, 6, 10, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchrist in view of Hurtt (U.S. 7054945 B2).

15. Regarding claims 5 and 19, as mentioned above Gilchrist teaches all of the limitations of claim 1.

16. Gilchrist does not teach defining a GTP tunnel in a GTP-C for at least one Radio Access Bearer (RAB).

17. Hurtt teaches (col. 2, lines 28-29) RAB. It would have been obvious to one of ordinary skill in the art to adapt RAB taught by Hurtt to Gilchrist's system as RAB is well known in the art of UMTS.

18. Regarding claims 6 and 20, Hurtt teaches (col. 2, lines 30 – col. 3, line 6) defining a GTP tunnel in a GTP-C for at least one PDP context with a same PDP address and APN for tunnel management messages.

19. Regarding claim 10, Hurtt teaches (col. 4, lines 66 – col. 5, line 8) the mobile communications network comprises a RNC and the IWF is disposed on a WLAN side of the

interworking, and establishing the at least one GTP-U tunnel couples the IWF of the WLAN to the GGSN of the mobile communications network while bypassing the RNC and the SGSN of the mobile communications network.

20. Claims 12 and 13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A. Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberta A Shand
Examiner
Art Unit 2616



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